

Listing of Claims:

1. (currently amended) A method for pre-caching an interactive television system with supplemental content related to a television program being displayed by the interactive television system, the method comprising:

in response to detecting a channel change on sensing a change in the television program being displayed by the interactive television system, obtaining contextual information pertaining to the television program and automatically sending an information request to a content source for supplemental content related to the television program prior to receiving a subsequent user request for such supplemental content, the information request comprising the contextual information;

in response to the content source identifying any supplemental content related to the television program being displayed based upon the contextual information, retrieving the supplemental content from the content source and pre-caching the retrieved supplemental content in the interactive television system for display in response to the subsequent user request.

2. (previously presented) The method of claim 1, further comprising:

in response to the subsequent user request to find supplemental content related to the television program being displayed, displaying the pre-cached supplemental content using the interactive television system.

3. (previously presented) The method of claim 1, further comprising:
in response to the subsequent user request to find supplemental content related to the television program being displayed:
displaying a list of pre-cached supplemental content items retrieved from the content source;
receiving a user selection of a supplemental content item from the list;
and
displaying the selected supplemental content item using the interactive television system.
4. (previously presented) The method of claim 2, wherein the user request is received in response to a user activating a specifically-designated button on a remote control device for the interactive television system.
5. (cancelled)
6. (previously presented) The method of claim 1, further comprising:
repeating the sensing, retrieving, and pre-caching steps at periodic intervals prior to receiving the user request while the television program is being displayed by the interactive television system.
7. (original) The method of claim 1, wherein the contextual information comprises an indication of the television program being displayed.

8. (original) The method of claim 7, wherein obtaining comprises:
reading the indication of the television program from vertical blanking interval (VBI) data associated with the television program.
9. (original) The method of claim 7, wherein obtaining comprises:
reading the indication of the television program from electronic programming guide (EPG) data associated with the television program.
10. (original) The method of claim 7, further comprising:
searching the content source for supplemental content related to the indication of the television program.
11. (original) The method of claim 1, wherein the contextual information comprises a time index.
12. (previously presented) The method of claim 11, wherein the time index indicates a time at which the information request is automatically sent.
13. (original) The method of claim 11, further comprising:
searching the content source for supplemental content related to a particular time segment of the television program based upon the time index.

14. (original) The method of claim 1, wherein the contextual information comprises at least one keyword obtained from closed-captioning text associated with the television program.

15. (original) The method of claim 14, further comprising:
searching the content source for supplemental content comprising the at least one keyword.

16. (original) The method of claim 15, further comprising:
in response to supplemental content comprising the at least one keyword not being found at the content source:
searching a global information network for supplemental content comprising the at least one keyword; and
retrieving the supplemental content from the global information network for storage in the interactive television system.

17. (original) The method of claim 1, further comprising:
in response to supplemental content related to the television program not being found at the content source:
searching a global information network for supplemental content related to the television program based on the contextual information; and
retrieving the supplemental content from the global information network for storage in the interactive television system.

18. (original) The method of claim 1, wherein the information request comprises an identifier of the interactive television system.

19. (original) The method of claim 18, wherein the identifier comprises one of a media access control (MAC) address and an Internet protocol (IP) address.

20. (original) The method of claim 18, wherein retrieving comprises:
sending the identified supplemental content from the content source to an interactive television system associated with the identifier.

21. (currently amended) The method of claim 1, wherein the contextual information comprises an indication of a channel being displayed, the method further comprising:

using the indication of the channel to identify a content source to receive the information request.

22. (previously presented) The method of claim 2, further comprising:
displaying the supplemental content simultaneously with the television program in response to the subsequent user request.

23. (original) The method of claim 22, further comprising:
reducing the size of the displayed television program relative to the size
of the displayed supplemental content.
24. (previously presented) The method of claim 1, wherein retrieving
comprises:
filtering the supplemental content according to a set of user preferences
for determining which supplemental content is to be pre-cached prior to
receiving the user request.
25. (original) The method of claim 24, wherein the set of user preferences
is included with the information request.
26. (original) The method of claim 24, wherein the information request
comprises an identifier of the interactive television system, and wherein the user
preferences are stored at the content source and accessed using the identifier of the
interactive television system.
27. (original) The method of claim 24, wherein at least one user preference
indicates a type of supplemental content to exclude.
28. (original) The method of claim 24, wherein at least one user preference
indicates a type of supplemental content preferred by the user.

29. (original) The method of claim 24, wherein at least one user preference indicates a source of supplemental content preferred by the user.

30. (original) The method of claim 24, wherein at least one user preference is stored in response to historical analysis of user selections of supplemental content.

31. (currently amended) A system for pre-caching an interactive television system with supplemental content related to a television program being displayed by the interactive television system, the system comprising:

a set top box configured to sense a change in the television program being displayed by detecting a channel change and, in response to detecting the channel change, obtain contextual information pertaining to the television program, automatically send an information request to a content source for supplemental content related to the television program prior to receiving a subsequent user request for such supplemental content, the information request comprising the contextual information, and retrieve supplemental content from the content source in response to the content source identifying the supplemental content as being related to the television program based upon the contextual information, wherein the contextual information comprises a time index; and

a storage device integrated with the set top box configured to pre-cache the retrieved supplemental content for display in response to the subsequent user request.

32. (previously presented) The system of claim 31, further comprising:

a display device to display the pre-cached supplemental content in response to receiving the subsequent user request.

33. (previously presented) The system of claim 31, wherein the set top box is further configured, in response to receiving the subsequent user request, to display on the interactive television system a list of pre-cached supplemental content items retrieved from the content source, receive a user selection of a supplemental content item from the list, and display the selected supplemental content item using the interactive television system.

34. (previously presented) The system of claim 32, further comprising:

a remote control device comprising a specifically-designated button for initiating the user request.

35. (cancelled)

36. (previously presented) The system of claim 31, wherein the set top box is further configured to automatically send an information request to the content source at periodic intervals prior to the user request and retrieve supplemental content from the content source related to the television program being displayed.

37. (original) The system of claim 31, wherein the contextual information comprises an indication of the television program being displayed.

38. (original) The system of claim 37, wherein the set top box is further configured to read the indication of the television program from vertical blanking interval (VBI) data associated with the television program.

39. (original) The system of claim 37, wherein the set top box is further configured to read the indication of the television program from electronic programming guide (EPG) data associated with the television program.

40. (original) The system of claim 37, further comprising:

a search engine configured to search the content source for supplemental content related to the indication of the television program.

41. (previously presented) The system of claim 31, wherein the time index indicates a time at which the change in the television program being displayed was sensed.

42. (previously presented) The system of claim 41, wherein the time index indicates a time at which the information request is automatically sent.

43. (original) The system of claim 41, further comprising:

a search engine configured to search the content source for supplemental content related to a particular time segment of the television program based upon the time index.

44. (original) The system of claim 31, wherein the contextual information comprises at least one keyword obtained from closed-captioning text associated with the television program.

45. (original) The system of claim 44, further comprising:

a search engine configured to search the content source for supplemental content comprising the at least one keyword.

46. (original) The system of claim 45, further comprising:

a search engine configured, in response to supplemental content comprising the at least one keyword not being found at the content source, to search a global information network for supplemental content comprising the at least one keyword; and

wherein the set top box is further configured to retrieve the supplemental content from the global information network for storage in the interactive television system.

47. (original) The system of claim 31, further comprising:

a search engine configured, in response to supplemental content related to the television program not being found at the content source, to search a global information network for supplemental content related to the television program based on the contextual information; and

wherein the set top box is further configured to retrieve the supplemental content from the global information network for storage in the interactive television system.

48. (original) The system of claim 31, wherein the information request comprises an identifier of the interactive television system.

49. (original) The system of claim 48, wherein the identifier comprises one of a media access control (MAC) address and an Internet protocol (IP) address.

50. (original) The system of claim 48, wherein the content source sends the identified supplemental content to an interactive television system associated with the identifier.

51. (original) The system of claim 31, wherein the contextual information comprises an indication of a channel being displayed, wherein the set top box is further configured to use the indication the channel to identify a content source to receive the information request.

52. (previously presented) The system of claim 32, wherein the set top box is further configured to display the supplemental content simultaneously with the television program using the interactive television system in response to the subsequent user request.

53. (original) The system of claim 52, wherein the set top box is further configured to reduce the size of the displayed television program relative to the size of the displayed supplemental content.

54. (previously presented) The system of claim 31, further comprising:
a filtering component configured to filter the supplemental content according to a set of user preferences for determining which supplemental content is to be pre-cached prior to receiving the user request.

55. (original) The system of claim 54, wherein the set of user preferences is included with the information request.

56. (original) The system of claim 54, wherein the information request comprises an identifier of the interactive television system, and wherein the user preferences are stored at the content source and accessed using the identifier of the interactive television system.

57. (original) The system of claim 54, wherein at least one user preference indicates a type of supplemental content to exclude.

58. (original) The system of claim 54, wherein at least one user preference indicates a type of supplemental content preferred by the user.

59. (original) The system of claim 54, wherein at least one user preference indicates a source of supplemental content preferred by the user.

60. (original) The system of claim 54, wherein at least one user preference is stored in response to historical analysis of user selections of supplemental content.

61. (previously presented) The method of claim 1, further comprising:
periodically replacing pre-cached supplemental content according to a replacement algorithm.

62. (previously presented) The method of claim 61, wherein the replacement algorithm comprises a least recently used (LRU) algorithm.